

**PRODUCTION OF ALPHA-OLEFIN OLIGOMER**

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**Abstract of JP10101587**

**PROBLEM TO BE SOLVED:** To make it possible to obtain highly selectively and efficiently the subject compound, especially ethylene trimer in a high yield, by reacting a specific transition metal compound and an aluminum compound with an  $\alpha$ -olefin. **SOLUTION:** An  $\alpha$ -olefin is reacted in the presence of (A) a compound represented by the formula  $MX_{<1>}X_{<2>} (TR_{<1>}R_{<2>}R_{<3>})_k$  [M is a transition metal;  $X_{<1>}$  and  $X_{<2>}$  are each H, a halogen or a (substituted)(branched)alkyl;  $R_{<1>}$  to  $R_{<3>}$  are each H, OH, a (substituted)(branched)alkyl, etc.; and may mutually be bonded to form a ring or a cross-linkage or two may be united to form an alkylidene, etc.; T is N, P or O; (k) is 2 or 4] [e.g. bis(triphenylphosphine)nickel(II) bromide] and (B) a compound represented by the formula  $R_{<4>}mAl(OR_{<5>})_nX_{<3>}pHqR_{<4>}$  and  $R_{<5>}$  are each a 1-15C hydrocarbon group;  $X_{<3>}$  is a halogen;  $0 < (m) \leq 3$ ;  $0 \leq (n) < 3$ ;  $0 \leq (p) < 3$ ;  $0 \leq (q) < 3$ ;  $[(m)+(n)+(p)+(q)]$  is 3} (e.g. methylaluminum dichloride).

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